



TOWN OF CARRBORO  
NORTH CAROLINA

**TRANSMITTAL**

**PLANNING DEPARTMENT**

**DELIVERED VIA:**  *HAND*  *MAIL*  *FAX*  *EMAIL*

**To:** David Andrews, Town Manager  
Mayor and Town Council

**From:** Zachary Hallock, Transportation Planner

**Date:** October 9, 2020

**Subject:** Update on Transportation Projects

**Summary**

Beginning in 2017, staff began providing regular updates on transportation projects to the then Board of Aldermen (now Town Council). This document is intended to update the Town Council on the status of ongoing transportation projects. These include NCDOT managed projects, Town managed projects, bicycle projects & planning, development projects, pedestrian safety projects, and The last update was provided on February 25, 2020. The previous agenda item can be found at: <https://carrboro.legistar.com/LegislationDetail.aspx?ID=4336492&GUID=75108466-7D65-491D-AEC7-F63CB4A4021C>

**NCDOT Projects**

**Estes Drive/North Greensboro Street Roundabout Project (U-5846)**

The project is ongoing and updates will be provided as construction progresses. As of 9/4/20 we are still anticipating that some lane closures will be needed as the construction of the stormwater pipes beneath the road progresses towards completion. Drilling is needed to remove rock, and the contractor may encounter unexpected pockets of rock during excavation and additional drilling may be needed in the future. Urgent public information related to this project will be posted via news flashes. General project information and history can be found online at: <https://carrboro.legistar.com/LegislationDetail.aspx?ID=4336492&GUID=75108466-7D65-491D-AEC7-F63CB4A4021C>

Merritt Mill/Franklin/E Main/Brewer intersection project (U-5847)

This project is completed as of February 2020. For more information about upcoming changes to E Main Street and this intersection, see the East Main Street Restriping Plan.

NC 54 West – Corridor Study and TIP Projects

The final project report was completed as of December 20, 2019.

More information on the study may be found at <http://www.nc54west.com/>.

As it currently stands, the DCHC MPO has decided against placing points on the NC 54 widening in the SPOT process, until such a point in time that Carrboro and Orange County can reach a consensus on this corridor. Operational improvements to NC 54 at Orange Grove Road (R-4821B) have been completed. On 8/26/20, staff were informed via the DCHC MPO TC that the currently accepted STIP project, Operational Improvements along NC 54 from Old Fayetteville Road to W Main St (U-6070), has been delayed 6 years as a result of the changes HB 77 made to NCDOT finances. HB 77 delayed projects currently programmed in the STIP by spreading out the currently programmed projects over a longer period of time. Staff are currently working to find more details and will provide an update when possible.

NC 54 Bike/Ped Safety Study: Old Fayetteville Road to Manning Drive (Chapel Hill)

The final project report was completed as of December 31, 2019.

More information on the study may be found at <http://nc54bikeped.com/>

This study did not identify funding for projects rather it developed recommendations which NCDOT, the Town of Carrboro, and the Town of Chapel Hill could work towards implementation. Staff are looking for opportunities to apply for Highway Safety Improvement Program (HSIP) funds and the recommendations for the NC 54/Smith Level Road interchange are being incorporated into the S. Greensboro Street Sidewalk project.

**Town Projects**Laurel Avenue Parking

An update on the status of Laurel Avenue on-street parking has been provided as part of a separate agenda item.

Starlite Drive Traffic Calming

An update on the status of the Starlite Drive Traffic Calming project has been provided as part of a separate agenda item.

### Plantation Acres Traffic Calming

An update on the status of the Plantation Acres Traffic Calming project has been provided as part of a separate agenda item.

### Unpaved Roads Speed Limits

An update on the status of setting speed limits for unpaved roads within the Town Limits has been provided as part of a separate agenda item.

### Bike Loop Detectors (U-4726-DF)

The Town has advertised the bike loop detector project (the installation of bike loop detectors at North Greensboro at Weaver and Main and Main at Roberson and at the intersection of Poplar at NC 54) twice, first in October 2017 and again in July 2019, without receiving any bids. Staff is working with NCDOT to determine if there may be other ways to move forward with the project, such as an add-on to the resurfacing project for East Main Street, or if the installation could be performed by NCDOT's traffic engineering division.

### Homestead Road-Chapel Hill High School Multi-Use Path (U-4726-DE)

This project is completed.

### Morgan Creek Greenway (EL-4828A)

The project consists of an approximately half-mile paved multi-use path beginning at the cul-de-sac at Abby Lane, extending to the Smith Level Road Bridge, running under the bridge to connect with a future multi-use path in Chapel Hill, and beginning again, along the south side of Morgan Creek to a turnabout point before the soccer field at the Berryhill Subdivision.

Phase 1 of the Morgan Creek Greenway was advertised in June 2019 and re-advertised in August 2019. Two bids came in higher than expected and, per NCDOT procedures, bids are not acceptable if higher than 10-percent above the Engineer's estimate. Staff continues to work with the Town Engineer (Sungate) to review the project and consider possible modifications to the design and value engineering prior to re-advertising the project for bid. CEI services will also be needed. Staff will reach out to surrounding property owners, particularly residents of Berryhill Subdivision and the Canterbury Townhomes, again, once there is a better sense of the schedule for moving forward.

### Jones Creek Greenway (C-5181)

Advertisement for engineering services, selection of Wetherhill Engineering, and approval of the firm & cost estimate by NCDOT was completed in the fall of 2018. The contract was executed before the end of 2018 and a project kickoff meeting was at the end of January 2019. During this kickoff the public input process was established to include open house input sessions at 15%, 30%, and 60% design. At the beginning of March 2019, planning staff facilitated an internal staff

discussion with the police department and school district to discuss issues related to greenway safety. The third public hearing for the project, at 65% design, was held on September 24, 2019. After further assessment for the greenway alignment and discussions with the County with regard to a potential staging areas and right of entry, updated plans, CE documents and environmental permit applications will be submitted to NCDOT in the near future. Staff continues to work with NCDOT to determine the status of CMAQ funds earmarked for construction.

Feedback from ITRE has indicated that if we wish to identify a location for a continuous bicycle-pedestrian counter along this greenway, we would be better suited waiting until construction is completed.

#### Estes Drive Corridor Study and Bike/Ped Improvements (EB-5886)

This project to consider improvements to Estes Drive from N Greensboro St to the Town Limits was submitted in SPOT 4.0 and accepted to the State Transportation Improvement Program (STIP). Due to the current NCDOT budget crisis, the DCHC MPO has been asked to reprogram the years identified for projects in the STIP, as the previous funding schedule has been spread out over a longer period of time. Staff are working with NCDOT to determine how or if the schedule for this project will be pushed back, and will coordinate with Chapel Hill to ensure consistency between the jurisdictions. More information will be provided at a later date.

#### South Greensboro Street Sidewalk (C-5650)

The Town entered into a municipal agreement from NCDOT in the summer of 2018 and a contract with Ramey Kemp Associates (RKA) in 2019 for design services. The scope of work for RKA also include a capacity analysis for the southern section of the corridor from the roundabout at South Green to the bridge over Morgan Creek. The 15% design plans have been completed, and planning staff have coordinated review between Town Departments, NCDOT, and external agencies to garner feedback on the design. Staff are working to develop a plan to hold a public meeting to gather public input on the 15% design.

#### West Main Street Sidewalk

As part of the development of the 2012 Durham and Orange county transit plans, the Town submitted a capital project request for funding to construct a sidewalk along West Main Street between Fidelity Street and Poplar Street. Staff requested delaying the funds for the Main Street project to a later fiscal year in order to receive funds for the South Greensboro Street sidewalk in an earlier fiscal year. A schedule for moving forward with the West Main Street project has not yet been determined.

#### Barnes Street Sidewalk (EB-5890) & Jones Ferry Road Sidewalk (EB-5880)

The Barnes Street and Jones Ferry Road sidewalk projects are programmed for funding in the 2019-2029 STIP. Staff has requested that the start date of these two projects begin in FY 2022, anticipating a schedule of design in FY 2022, ROW acquisition FY 2023 and construction FY

2024. The proximity of the two projects offers an opportunity to seek one contractor to construct both projects if such an arrangement provides an economy of scale benefit. Due to the NCDOT budget crisis, the DCHC MPO is working with NCDOT and local governments to update the schedule for locally administrated projects (LAP) in the STIP, which have been delayed by the suspension.

### East Main Street Restriping Plan

Draft pavement marking plans were approved by NCDOT in April, 2020, and we were informed of the need to prepare additional plans construction the necessary signal modifications that would be required due to the pavement marking changes. Staff are working with Stantec and NCDOT to finalize the pavement marking plans so that work on the signal timing plans can begin on schedule. The resurfacing for this project is anticipated to occur in the summer of 2021.

### Jones Ferry Road – Protected Bike Lanes

Town staff have been working with NCDOT Division 7 and Division Bike/Ped Transportation to identify potential treatments for protected bike lanes on Jones Ferry Road, an interest identified as part of the Spot Safety Improvement Project for the corridor. To date, discussions with Public Works and NCDOT have focused on concerns over cost, maintenance, snow clearance, and transit operations. Based on feedback received from NCDOT during the Bike Plan Update, staff have currently identified a set of potential treatments which could be used as different test areas along the corridor. Town Staff met again with NCDOT Division 7 and Bike Ped on January 27th to finalize test zones along the corridor as part of a pilot project. This pilot is expected to last at least one year and will include data collection of vehicle volumes, speeds, and bicycle volumes (before, during, and after the pilot); public input sessions; and survey to gauge public perceptions of safety and preferred treatment.

Recent communication with NCDOT Division 7 has indicated that, if desired, the Town could proceed with a protected bike lane installation using standard white delineator poles for vertical separation, installed through encroachment agreement. Staff are currently developing an encroachment agreement application, with the goal of starting the pilot before the end of this fiscal year.

## **Bicycle Projects and Planning**

### Bicycle Transportation Plan Update

On September 22<sup>nd</sup>, the Council set the public hearing to consider adoption for October 27<sup>th</sup>, this item was also referred to the Planning Board, Transportation Advisory Board, and Environmental Advisory Board for comment. A presentation was made to the Joint Advisory Boards on October 1<sup>st</sup>.

### Bicycle Friendly Communities Application

Staff will use information from the BFC scorecard and priority projects identified in the Updated Bike Plan to better situate the Town for the next application for the BFC program in 2023.

### Bike Share

Staff have been continuing to coordinate with both the Town of Chapel Hill and Gotcha (the current bike share provider for UNC) to develop a potential pilot program to operate in both towns. Additional information as to the specifications of the program have been provided as a separate agenda item.

### Pathway Drive Bike Boulevard

There has been no change on this item from the previous report.

### Cobblestone Colfax Connector

There has been no change on this item from the previous report.

### Cobblestone Drive Traffic Calming

This traffic calming project is completed. Follow up traffic count to assess the effectiveness of the installed devices will be scheduled at a later date, pending return to normal travel and commuting patterns.

## **Development Projects**

### Lloyd Farm Development Traffic Mitigation

With the approval of the Lloyd Farm Phase 1 Conditional Use Permit, one condition imposed was a financial contribution of \$15,000 to be used on traffic calming efforts in the Plantation Acres Neighborhood. This was included due to the considers that neighborhood residents anticipated increased traffic as a result of the development. Residents have expressed interest in modifying the access to/from Carol Street at Old Fayetteville Road. Staff are working to schedule a public meeting to gather input on resident preferences for changes to that location.

Additional information about the current traffic calming project (to address traffic issues identified by residents in the present day) was provided as a separate agenda item.

## **Pedestrian Safety Projects**

### Locations Based on Citizen & TAB Requests

Planning and Public Works continue to coordinate on the development of preliminary design plans, to be used for encroachment agreement to make modifications to NCDOT streets or on Town Streets, for the following locations:

- N Greensboro St @ Pine St: High-visibility crosswalk markings and signage
- Culbreth Rd @ Rossburn Way: High-visibility crosswalk markings and signage
- Old Pittsboro Road: Shared Lane Markings and Bicycle Wayfinding
- Roberson Street @ Libba Cotten: Intersection Safety Markings

A number of other locations are still under consideration, however, both the current COVID-19 pandemic's impact on travel patterns and NCDOT's suspension of projects has had an impact on the previously anticipated schedule for these projects. Additionally, NCDOT has informed us that neither Rapid Rectangular Flashing Beacons (RRFBs) or High-intensity Activated Walk (HAWK) signals are acceptable for installation within an intersection. Data collection is required to support a traffic signal warrant and will be scheduled when conditions are supportive.

- W Main St @ Hillsborough Rd: Traffic Signal and/or Pedestrian Median Island
- Hillsborough Rd @ James St: Traffic Signal
- N Greensboro St @ Shelton St: Traffic Signal
- W Main St @ W Weaver Street: Bike Boxes, Bike Loop Detectors, Bike Lane Intersection Markings, Curb Radii revisions, and Pedestrian Signal Heads where needed

The status of the pedestrian safety projects, which have been prioritized based on cost estimates, traffic volumes, bike-ped counts, safety data and input from the TAB is described in the table on the following page.

	NAME	Identified Improvement	Current Status
NCDOT to Perform	Weaver @ E Main St	Pavement markings (NCDOT)	Resurfacing to occur in Summer 2021
	N Greensboro @ Oak St	High-vis crosswalk (covered by STIP, includes PHB)	Estes-Greensboro Roundabout to be completed by September 2021
	N Greensboro @ Williams St	High-vis crosswalk (covered by STIP, includes PHB)	
	N Greensboro @ Hillsborough Rd	High-vis crosswalk (covered by ADA ramps) & RRFB	Timeline for ADA upgrades uncertain due to NCDOT budgetary constraints
	Jones Ferry @ Bim St	High-vis crosswalk (covered by ADA ramps)	
	W Main @ Poplar Ave	High-vis crosswalk	
N Greensboro @ Robert Hunt Dr	High-vis crosswalk (covered by ADA ramps)		
Town to perform through Encroachment Agreement	S Greensboro @ Merritt Mill Rd	Bicycle improvements and ped signal heads	Improvements identified in the NC 54 Safety Study working to be incorporated into the Design of the S Greensboro Sidewalk Project
	Weaver @ E Main St	Ped heads or signal modifications	EMSOA will address pavement markings and signal timing modifications, will assess signal heads after completion of resurfacing
	W Main @ W Weaver	High-vis crosswalks, bike lane markings, bike boxes, curb extensions & ped signal heads	Collect data to assess need for bike boxes; coordination with NCDOT ADA upgrades
	W Main @ Jones Ferry Rd	Bicycle improvements, marked crosswalk ped signal heads	Beginning preliminary design to add missing crosswalk, other items on hold pending bike plan recommendation
	Merritt Mill Rd @ Cameron St	Bicycle improvements and ped signal heads	On hold pending future coordination with Chapel Hill
	N Greensboro @ Pine St	High-vis crosswalk, ADA ramps	Developing design to submit with encroachment agreement
	Hillsborough @ James St	Traffic signal with pedestrian signals	Insufficient width for refuge island, collect data to assess signal warrant, survey needed
	Jones Ferry @ Davie Rd	Bicycle intersection improvements	On hold pending protected bike lane pilot
	W Main @ Hillsborough Rd	Median island and/or traffic signal	Assessing width for refuge island, collect data to assess signal warrant, survey needed
	N Greensboro @ Shelton St	Traffic signal	Collect data to assess signal warrant or crossing demand for RRFB, survey data needed
	NC 54 @ Westbrook Dr	PHB or HAWK or traffic signal	Recommendation identified in NC 54 Safety Study, funded through OC Transit Plan
	Hillsborough @ High/Cheek St	Hi-vis x-walk	Need to consider additional sidewalk due to lack of connection infrastructure needed for NCDOT to approve crosswalk
	W Main @ Ashe St	Hi-vis x-walk and ada curb ramps	Beginning preliminary design
	Old NC 86 @ Hillsborough Rd	Pedestrian refuge island, ada curb ramps	Beginning preliminary design
	Jones Ferry Protected Bike Lane	Physical delineation to place in buffer	Sungate has completed exhibit, Staff identified budget, working to develop encroachment application
	W Main @ High/Westview	Hi-vis crosswalk and RRFB (Rectangular Rapid Flashing Beacon)	Need to consider additional sidewalk due to lack of connection infrastructure needed for NCDOT to approve crosswalk
	Homestead @ Claremont Rd	Lighting & RRFB plus median island	Beginning preliminary design
	Culbreth Drive and Rossburn way	Hi-vis crosswalk	Preliminary design complete
	Hillsborough @ McDougle Driveway	Pedestrian refuge island	Beginning preliminary design
Town to perform	Roberson @ Libba Cotten	Raised intersection or green paint	Preliminary design complete
	Old Pittsboro Rd	Sharrows and bike route (or Bike Blvd)	Preliminary design complete
	Cobblestone Connector	Widen sidewalk to 10' Multi Use Path (MUP)	Sungate has completed concept design, on hold due to low priority.
	Preliminary Design Completed		
	Preliminary Design In Progress		
	Project on Hold		
	Additional data collection, survey work, or supporting infrastructure required		

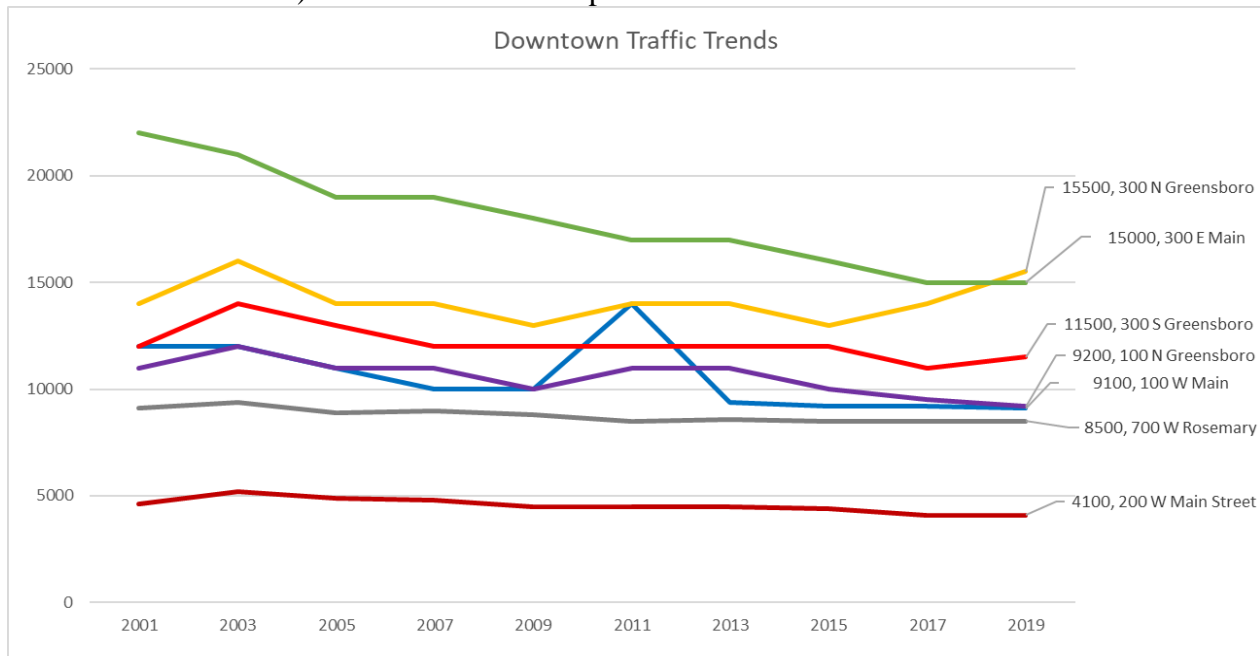


Downtown Safety Improvements

Conversations with NCDOT have indicated that the State Traffic Engineer will not approve speed limits lower than 25 MPH on state maintained facilities due to the difficulties with enforcement. In light of this, staff are working to pursue engineering improvements to help manage vehicle speeds within and around downtown including: Leading Pedestrian Interval (LPI), the East Main Street Restriping Proposal, and Pedestrian Safety Projects (mentioned above). Additionally, implementing No Right Turn on Red (RTorR) can be investigated but is a more detailed process, which will require approval from the State Traffic Engineer.

Downtown Traffic Volume Trends

In the past, the Board of Aldermen received updates on traffic volume counts and traffic operations within the downtown area. As an alternative to a detailed traffic analysis, a review of the historic trends in available Annual Average Daily Traffic (AADT) as collected by NCDOT can be an efficient way to gain useful insights. The table below displays the AADT volumes collected between 2001 and 2019 for locations at: 100 W Main St, 300 E Main St, 300 N Greensboro St, 100 N Greensboro St, 300 S Greensboro St, 700 W Rosemary St, and an aggregate total volume. While the majority of locations have seen flat or mild fluctuations in AADT, the 300 E Main Street location has consistently trended downwards during this period (a decrease of about 32%). This item has been updated with NCDOT 2019 AADT volumes.



Safe Routes to School Implementation Committee

Due to the restrictions in place to limit the spread of COVID-19, the call for applicants to the SRTS Implementation Committee has been delayed. Staff are working to determine the best method to identify interested community members and reconvene this group as a subcommittee of the Transportation Advisory Board.

## **Transit Projects**

### **Orange County Transit Plan Update**

The OCTP is funded by the transit dedicated half-cent sales tax that was approved by Orange County voters in 2012. The current OCTP was adopted in 2017 and can be viewed online at: [https://gotriangle.org/sites/default/files/publications/orange-county-transit-plan\\_170424\\_app.pdf](https://gotriangle.org/sites/default/files/publications/orange-county-transit-plan_170424_app.pdf)

While it can be unclear what improvements Carrboro is getting out of a transit plan, as our service is operated by Chapel Hill Transit, there are a number of capital improvements which enhance transit service (such as upgraded bus stops and greenways/sidewalks) that received funding from the 2017 plan. Summarized below are the projects in Carrboro:

<b>Type</b>	<b>Description</b>	<b>Year</b>
Transit	Bus stop improvements for the 405 Route in Carrboro	FY18-20
Transit	Two new shelters for bus stops in Carrboro	FY18-20
Access	Morgan Creek Greenway	FY18-20
Access	S Greensboro St Sidewalk	FY18-20
Access	W Main St Sidewalk	FY18-20
Access	NC 54 Hawk Signal	FY18-20
Access	Estes Drive Corridor Study and Bike Ped Improvements	FY21-22

The framework for the Orange County Transit Plan (OCTP) Update was approved by the Orange County BOCC in November 2019, to update the plan due to the discontinuation of the Durham-Orange Light Rail project. On August 27, 2020 Orange County announced that it would begin public engagement and outreach for the plan including a public survey, which can be found online at <https://www.surveymonkey.com/r/OCTransit>. On Thursday, October 1<sup>st</sup>, the first Orange County Transit Summit was held via Zoom. Staff are working to coordinate with the Transit Plan team to ensure that capital projects from the previous plan are carried over to the new plan. For more information about the plan update and ways to get involved visit the project website at: <https://octransit2020.com/>

### **CHT Short Range Transit Plan (SRTP) Service Changes**

Due to the restrictions in place to limit the spread of COVID-19, Chapel Hill Transit has only proceeded with partial implementation of the SRTP and is currently running a reduced schedule, which began on August 3<sup>rd</sup>.

- The following routes are running 7 days a week, plus some holidays: A, CM, CW, D, J, NS, NU, & U.
- The following routes are running Monday through Friday: FCX, HS, RU, & S
- The Senior Shuttle and EZ Rider are running on regular schedule.

- The Carrboro Plaza Park and Ride has ceased being a PnR lot as of August and will no longer be served. Riders should use the Jones Ferry Park and Ride lot, approximate three-quarters (3/4) mile away.

Several routes have no changes identified in the SRTP, these are the J, JFX, NS, RU, and U routes. Several routes will no longer run, but service will be provided by other routes. The routes and their substitutes are defined below:

<b>Route going out of service</b>	<b>Routes to switch to</b>
CPX route	CM route, JFX route
HU route	B route
V route	NS route, N route
FG route (Saturday)	A route
JN route (Saturday)	J route, N route

More information can be found at:

<https://www.townofchapelhill.org/government/departments-services/transit/service-changes>

#### North-South Bus Rapid Transit (NSBRT)

On September 22<sup>nd</sup>, the Chapel Hill Transit Partners received an update on the current status NSBRT Project. The following information was provided:

- Chapel Hill Transit staff applied for the NEPA Class of Action request on 8/13/20.
- CHT staff declined to request a project re-evaluation (declining does not have an impact on the project, unless the resubmittal is required by the FTA) as there are changes underway that could influence the rating in the future:
  - Chapel Hill Future Land Use Map & Land Use Management Ordinance updates
  - North Chapel Hill Master Plan
  - East Rosemary Redevelopment
  - Orange County Transit Plan
- The NSBRT has applied for \$35M in state funds under SPOT 6.0, there are \$14.1M in allocated funds from the Orange County Transit Plan, and the project will be seeking the maximum \$99M in Federal Funding through the Small Starts process.
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#### Carrboro Trolley

Based on conversations with previous Economic Development Director Annette Stone, and Chapel Hill Downtown Partnership director Matt Gladdek, this project has been defined as more of a cultural attraction amenity rather a transportation project. It is recommended that a service provider other than Chapel Hill Transit be considered to provide the type of service desired.